



Department of Energy, Mines & Resources
PO Box 2703, Whitehorse, Yukon Y1A 2C6



February 26, 2019

File No: LQ00511

Ralph Barchen
P.O. Box 272
Mayo, YT
Y0B 1M0

Dear Sir:

Re: Class 3 Quartz Mining Land Use Approval

Your application for a Class 3 approval has been approved and is subject to the attached conditions. The effective date of this approval will be February 26, 2019. All work, including restoration, must be completed on or before February 25, 2029, and inspected before full security and/or completion certificates can be applied for.

The attached 'Operational Guidelines' offer additional mitigations that would enable you to maximize the environmental performance of your program, but are not approval conditions.

Please ensure that pre-season and post-season reports are provided before and after each exploration season. Pre- and post-season reports assist the Mineral Resources Branch in monitoring exploration activity and reclamation. Not providing reports may result in additional security being required.

Please feel free to contact our office at (867) 996-2256 should you have any questions.

Regards,

Bobbie Milnes
Chief, Mining Land Use

cc: EMR Natural Resources Officer, Compliance Monitoring and Inspections
ENV Environmental Affairs, Environmental Protection Branch



**MINING LANDS
MINERAL RESOURCES BRANCH
GOVERNMENT OF YUKON**

Pursuant to the *Quartz Mining Act* and *Quartz Mining Land Use Regulation*, the Chief, Mining Land Use hereby grants a Class 3 approval to:

Ralph Barchen
P.O. Box 272
Mayo, YT
Y0B 1M0

APPROVAL NUMBER: LQ00511
PROPERTY NAME: Keno Hill
UNDERTAKING: Quartz
CLASS: Class 3 Approval
EFFECTIVE DATE: February 26, 2019
EXPIRY DATE: February 25, 2029

This approval shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Quartz Mining Act* and the *Quartz Mining Land Use Regulation* made there under as proposed in Mining Land Use Application LQ00511.

Dated this February 26, 2019


Bobbie Milnes
Chief, Mining Land Use

**MINING LAND USE
APPROVAL
Class 3**

SCOPE OF APPROVAL:			
Claim Status Report (Appendix A)		LQ00511	
Operating Season	June 1 – October 1	Keno Hill	
PROJECT ACTIVITIES (ON-CLAIM):			
USE OF VEHICLES/EQUIPMENT			
Use of vehicles on existing roads or trails			<input type="radio"/> No <input type="radio"/> Yes
Gross vehicle weight	On-roads: More than 40t	On-trails: less than 20t	
Off-road use of vehicles in summer			<input type="radio"/> No <input type="radio"/> Yes
Off-road use of vehicles in winter			<input type="radio"/> No <input type="radio"/> Yes
NEW & EXISTING ACCESS			
Upgrading of existing access	<input type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
New roads	<input type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
New trails	<input type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
New temporary trails	<input type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
LINES & CORRIDORS			
Lines	<input type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
Corridors	<input type="radio"/> No <input type="radio"/> Yes	Length: 0 km	Width: 0 m
SITE PREPARATION			
Number of clearings per claim: 0		Area: 0 m ²	
Number of clearings for helicopter pads and camps: 0		Area: 0 m ²	
Removal of the vegetative mat			<input type="radio"/> No <input type="radio"/> Yes
EXPLORATION TRENCHING & BULK SAMPLING			
Hand-dug			<input type="radio"/> No <input type="radio"/> Yes
Mechanized			<input type="radio"/> No <input type="radio"/> Yes
Number: 10	Length: 61 m	Width: 7.3 m	Depth: 4.6 m
Total volume: 20,483.8 m ³			
Existing Trench: Gold Star Claim 3000m ³		Existing Trench: MPI 1500m ³	
Bulk sampling		<input type="radio"/> No <input type="radio"/> Yes	Amount/year: 100 tonnes
Explosives	<input type="radio"/> No <input type="radio"/> Yes	Total amount: 200 kg/year	Max. in 30 days: 50 kg
EXPLORATION DRILLING: N/A			
FUEL STORAGE: N/A brought to site daily in 600 L Tidy Tank			
FACILITIES & STRUCTURES:			
Camp structures: No Camp			
Number of persons in camp at any one time: 0		Number of person days: 0	
Construction of underground structures			<input type="radio"/> No <input type="radio"/> Yes

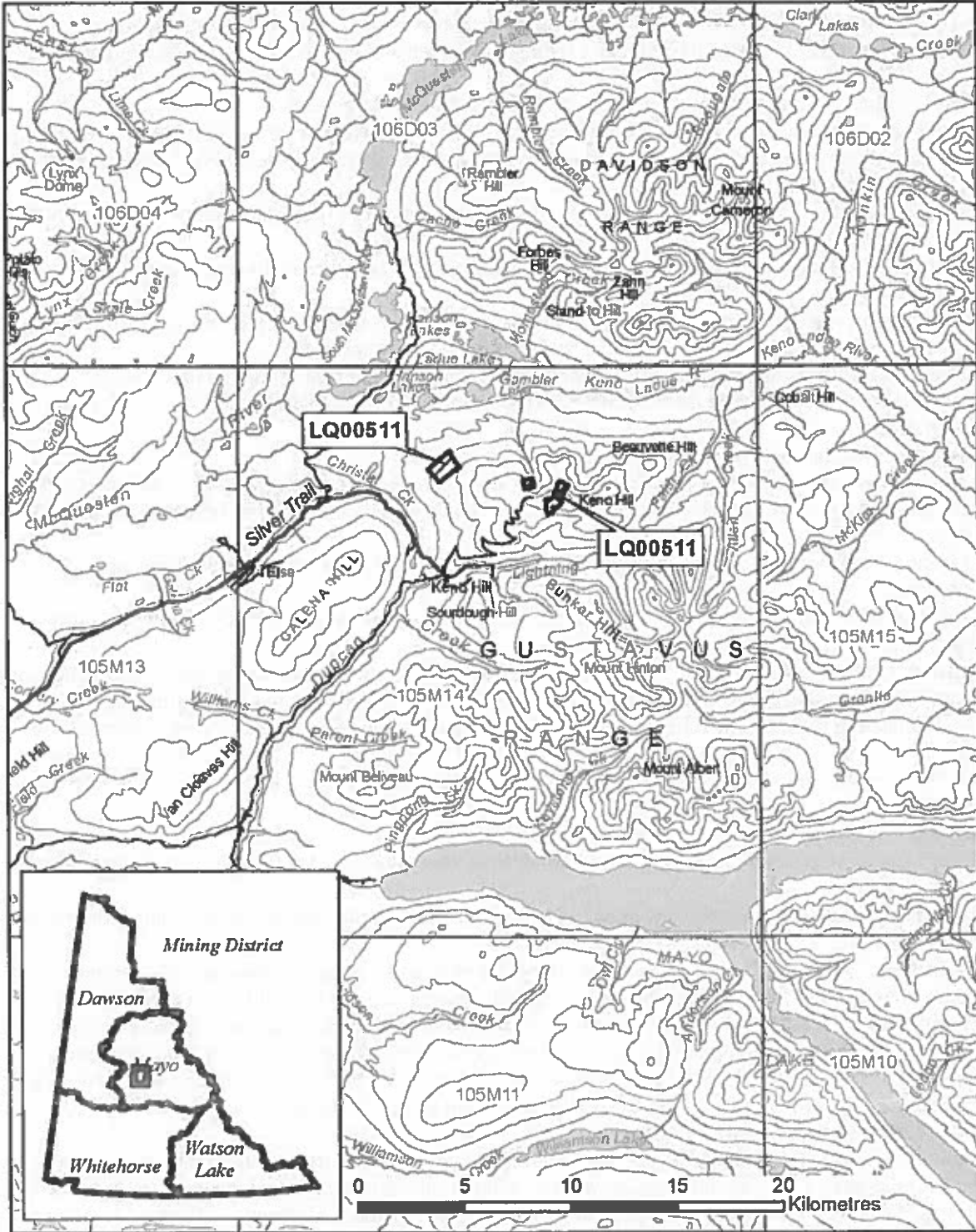
MINING LAND USE APPROVAL

Class 3

All other applicable legislation, regulations, laws, by-laws and ordinances must be complied with. Additional authorizations or approvals may be required. Any doubt as to whether an additional authorization or approval is required should be verified by a duly authorized official at the appropriate government body or bodies.

MINING LAND USE
APPROVAL
Class 3

LQ00511
Keno Hill
Ralph Barchen



**MINING LAND USE
APPROVAL
Class 3**

DEFINITIONS

“Act” means the *Quartz Mining Act*, S.Y. 2003, c.14;

“Access road” means a road that provides access to a public highway or to a private road;

“Adverse effects” of an exploration program means its adverse environmental or socio-economic effects and any adverse effects it may have on the existing or asserted aboriginal or treaty rights of any First Nation;

“Chief” means the Chief of Mining Land Use designated pursuant to the Act;

“Clearing” means an area that is cleared of trees, brush or vegetative mat for the purpose of establishing a campsite or carrying out mining exploration, but does not include an area cleared for the purpose of establishing a corridor or trail;

“Corridor” means a path from which trees and brush have been cut to accommodate a water line, fuel line or power line;

“Effective date” means the date this Approval comes into force as evidenced by the date of the signature of the Chief;

“Exploration program” means any activity or group of activities undertaken for the sole or principal purpose of assessing land for its suitability for the production of minerals;

“Foundation” means the part of a structure that penetrates the ground and supports the structure;

“Isolated road” means a road that does not provide access to a public highway directly or through a private road;

“Inspector” means an inspector designated pursuant to the Act;

“Line” means a line cut for the purpose of carrying out a geophysical, geological, or engineering survey;

“Low ground pressure vehicle” means a vehicle that applies 35 kPa of pressure or less to the ground surface;

“Operator” means a person who is engaging in an exploration program, or in development or production;

“Person-day” in respect of the use of a campsite, means the use of the campsite by one person during a period of 24 hours;

“Response” means a notice given by the Chief that indicates whether or not an exploration program may be carried out or that extends the time for the Chief’s review of a Notification or operating plan;

“Road” means a pathway for vehicular traffic the construction of which requires the movement of rock or earth;

“Site” means the area bounded by the sum of the mineral claims described above under ‘Scope of Approval’;

“Summer” means the period of a year that is not winter;

“Trail” means an access to a site within a claim or lease that is constructed with little or no movement of rock or earth; and

“Trenching” means excavation carried out on a mineral claim for the purpose of obtaining geological information;

“Upgrading”, in relation to a road, means re-establishing a road that has not been useable for more than five years by vehicles of a type the road was originally designed to serve, modifying a road to provide usability for vehicles that are of a different type than those for which the road was originally designed to serve and any other upgrading or modifying of a road, other than for maintenance or erosion control;

“Vegetative mat” means the organic surface of soil, characterized by the accumulation of organic matter, or partly decomposed organic matter, derived mainly from leaves, twigs, and woody materials, and includes the root mass of living vegetation;

“Winter” means the period of the year during which (a) the ground is frozen sufficiently to support a vehicle, other than a low ground pressure vehicle, without rutting or gouging of the surface; and (b) there is a sufficient amount of snow on the ground to produce a packed base of 10 cm.

PART ONE – GENERAL REQUIREMENTS

Duration of Approval

- 1.0 This approval is valid upon signature of the Chief until the expiry date. In the event that claims lapse, or that agreements to operate on claims are dissolved, the approval becomes null and void for that portion of the operating plan, where there is no right to the minerals.

Compliance with Operating Conditions

- 1.1 All mineral exploration activities must comply with the Operating Conditions contained in Schedule 1 of the *Quartz Mining Land Use Regulation* and within the approval. Where there is a difference between the operating conditions and approval, the terms of this approval shall prevail. These Operating Conditions are enforceable.

Reporting Requirements

Contact Information

- 1.2 Submissions and reports to the Chief should be made to both the following addresses:

Chief, Mining Land Use
Box 2703, K-9
Whitehorse, Yukon
Y1A 2C6

Mining Lands Officer
Box 10, K-MA
Mayo, YT Y0B 1M0
mayo.mining@gov.yk.ca

- 1.3 The contact for the operator will be:

Ralph Barchen
P.O. Box 272
Mayo, YT
Y0B 1M0
rbarchen@hotmail.com
867-996-2832

Pre-season and Post-season Reporting

- 1.4 A report shall be submitted at the beginning of each mining season outlining the exploration activities planned for the season including the proposed locations.
- 1.5 A report shall be submitted at the end of each mining season indicating exploration activities completed during that season. This report shall include but is not limited to:
- detailed mapping of all areas worked;
 - location of new construction;
 - new areas of disturbance;
 - map data, in the form of SHP files or GIS compatible, of all new roads and trails;
 - map data, in the form of SHP files or GIS compatible, of all reclaimed roads and trails;
 - areas of permafrost encountered;
 - total disturbed area;
 - pre-activity survey results, if applicable;
 - reclamation activities; and
 - documentation produced by environmental monitors.
- 1.6 The operator shall contact the Mayo Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 996-2343 at least 14 days prior to commencing the field season.
- 1.7 The operator shall contact the Mayo Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 996-2343 at least 14 days prior to leaving the site at the end of the operation.

Spill Reporting

- 1.8 All spills must be reported immediately to the 24-Hour Yukon Spill Reporting Line (867) 667-7244 and to the Mayo Mining Inspections Office (Compliance, Monitoring and Inspections) at (867) 996-2343.
- 1.9 An operator who takes an emergency remedial measure shall, as soon as possible but not later than 10 days after taking it, send a written report to the Chief describing the duration, nature and extent of the emergency and the measures taken to respond to it.

Heritage Reporting

- 1.10 All paleontological resources uncovered during operations shall be reported to the Yukon Paleontology Program, Government of Yukon in Whitehorse at (867) 667-8089 or (867) 667-5386 and the Chief.
- 1.11 All archaeological resources uncovered during operations shall be reported to the Yukon Archaeology Program, Government of Yukon in Whitehorse at (867) 667-3771 or (867) 667-5386 and the Chief.
- 1.12 The report(s) developed for Section(s) 2.33, shall be submitted to Government of Yukon – Heritage Resources Unit, Cultural Services Branch.

Wildlife Reporting

- 1.13 All incidents with wildlife shall be reported to the District Conservation Officer in Mayo (Northern Tutchone Region) at (867) 996-2247.

PART TWO – PROJECT SPECIFIC OPERATING CONDITIONS

Schedule 1 Operating Conditions (Appendix B)

The operator is bound by the Schedule 1 Operating Conditions per the *Quartz Mining Land Use Regulation*. In addition to the Schedule 1 Operating Conditions, the operator must also comply with the following terms and conditions:

Erosion Control and Permafrost

- 2.0 The operator shall insulate the ground surface beneath all temporary structures and temporary facilities used in the project where permafrost is present to:
- a) prevent any vegetation from being removed; and
 - b) prevent the ground from settling or eroding.

Trenching

- 2.1 Open trenches shall be sloped at one end to avoid entrapment of wildlife.
- 2.2 The operator must ensure that all employees and contractors working at the trench sites are aware of the operating conditions for trenching.

Solid Waste

- 2.3 The operator shall keep all garbage, including kitchen waste, in a container that prevents access by bears and other wildlife, until properly disposed of in accordance with the *Solid Waste Regulations*.
- 2.4 When burning kitchen waste on site it must be burned regularly to reduce odours that might attract wildlife and be burned to ash by forced air or fuel fired incineration.

Petroleum Fuel and Hazardous Substances

- 2.5 The operator shall, with indelible marker or paint, clearly identify the owner, the contents and the date on fuel drums to establish and manage ownership and responsibility.
- 2.6 All fuel cache(s) must be protected with an earthen berm and flagged to prevent spills resulting from accidental contact with heavy equipment. Flags should be visible above the snow pack.
- 2.7 The location of any spills shall be clearly marked with stakes or flags.

Drilling

- 2.8 The operator must ensure that all employees and contractors working at the drill sites are aware of the operating conditions for drilling.

Bulk Sampling and Acid Rock Drainage/Metal Leaching

- 2.9 Waste rock piles must be located at least 30m from any water body and be physically stable.
- 2.10 Waste rock containing sulfides must be returned underground.
- 2.11 No acid generating or metal leaching material shall be used for road construction.
- 2.12 The operator shall expedite the removal of bulk samples from the property.
- 2.13 Bulk samples stored on site shall be located at least 30 m from any water body.
- 2.14 Bulk samples shall be stored on an impermeable liner and in a fashion that poses no acid rock drainage/metal leaching risk, until removed from the property.
- 2.15 The operator shall submit an Acid Rock Drainage/Metal Leaching Plan for review and approval, to the Chief of Mining Land Use within ninety days (90) of issuance of approval LQ00511, before trenching and bulk sampling may occur. The Chief may require any additional information he/she considers necessary. The operator may not proceed with this work until such approval is granted. The approved plan shall be incorporated as a condition of Approval LQ00511.
- 2.16 The Chief may add any term to the Acid Rock Drainage/Metal Leaching Plan that he/she feels necessary.
- 2.17 Waste rock and ore with the potential for acid generation or metal leaching shall be segregated and stored on liners and under covers to minimize interaction with air and water. Bulk samples must be stored on an impermeable liner at least 30 m from any waterbody, until removed from the site.
- 2.18 Bulk samples must be removed from the site as soon as possible to prevent any lengthy storage of the sample and reduce the likelihood of acid rock drainage/metal leaching.
- 2.19 Bulk samples must be removed from site or reclaimed no longer than 12 months after being excavated.

Wildlife

- 2.20 The operator shall contact the Regional Biologist (867-996-2162) for information on appropriate trenching/blasting set back distances if nests, dens, pika haystacks, or mineral licks are encountered.
- 2.21 Trenches shall be ramped to avoid entrapment and allow egress for wildlife.
- 2.22 To minimize effects of noise, blasting shall not occur during sensitive times for wildlife (e.g. nesting). The Regional Biologist (867-996-2162) shall be contacted to determine the sensitive times for wildlife in the area.

2.23 The operator shall carry out all phases of the project in a manner that protects and avoids harming, killing or disturbing migratory birds or destroying or taking their nests or eggs.

2.24 If active bird nests are discovered, project activities shall be postponed in the nesting area until nesting is complete.

Explosives

2.25 Explosives must be set off in a way that minimizes their impact on wildlife and the public and that will not cause forest fires, unplanned landslides, artificial damming or other obstructions of streams.

Worker/Public Safety

2.26 The operator shall develop and submit a plan for review and approval to the Chief of Mining Land Use which outline how safety (worker and public) will be maintained where surface mining occurs over top of historic underground workings.

2.27 No surface mining work may occur over top of or adjacent to historic underground workings until the Chief has approved the Safety Plan (worker and public). The Chief may add any terms and conditions to the Safety Plan (worker and public) that he/she feels necessary. The operator may not proceed with this work until such approval is granted. The approved Safety Plan (worker and public) shall be incorporated as a condition of Approval LQ00511.

2.28 Blasting mats shall be used to minimize fly-rock and debris.

2.29 Prior to the commencement of exploration activities, the operator shall post signs at all trailheads affected by project activities informing trail users of potential exploration activities and hazards.

2.30 The operator shall install and maintain fencing and signage around trenches and other hazardous excavations sufficient to prevent public access to mine workings on Keno Hill.

Public Communications

2.31 The operator shall communicate plans and timing of activities with area residents and other resource users (e.g. Alpine Interpretative Centre, Wildlife Viewing, Tourism Yukon, etc.) that may be affected by the proposed project 30 days prior to beginning exploration activities of each year.

Heritage

2.32 The operator shall contact Government of Yukon's Historic Sites Unit (867-667-8258) to request information on the locations of historic resources in the project area and to discuss mitigation strategies 30 days in advance of project activities.

2.33 A heritage resources impact assessment shall be completed in advance of ground-disturbing activities in areas with elevated potential of archaeological or historic sites.

2.34 Upon discovery of a heritage resource, the operator shall notify the First Nation of Na-Cho Nyak Dun in addition to Government of Yukon, Chief of Mining Lands and Tourism-Heritage.

PART THREE – RECLAMATION AND/OR DECOMMISSIONING

- 3.0 Reclamation and/or decommissioning shall be progressive in nature and shall be documented annually in the post-season report. Reclamation and/or decommissioning of exploration workings shall occur as soon as they are no longer needed unless the need is documented in the post and pre-season reports. The status of exploration workings (i.e. active or inactive) and ongoing/completed reclamation activities shall be reported to the Chief, Mining Land Use annually via post-season reports.
- 3.2 Reclamation of trenches will be progressive and shall occur as soon as trenches are no longer needed for exploration activities unless the need is documented in the post and pre-season reports. Final reclamation of trenches shall occur prior to the expiry of this Approval.
- 3.3 Reclamation and/or decommissioning shall be progressive in nature where possible and will occur prior to the expiry of the exploration program or prior to the expiry of this approval, whichever comes first, according to standards outlined in the operating conditions, unless otherwise specified by the Chief.
- 3.4 Debris, equipment, fuel barrels, scrap metal and other waste at the work site shall be completely disposed of, so as not to attract wildlife, by removal to an authorized disposal site at the cessation of the exploration program or prior to the expiry of this approval, whichever comes first.
- 3.5 Structures must be removed and the site restored at the end of the exploration program or prior to the expiry of this approval, whichever comes first, to a level of utility comparable to its previous level of utility.
- 3.6 If an amendment to this approval or new approval is granted, for the claims within the scope of this approval (Appendix A), all outstanding reclamation continues to be the responsibility of the operator.

PART FOUR – OTHER MATTERS

- 4.0 Security may be required at any time by the Chief.
- 4.1 Notice of Schedule III must be provided to the Yukon Water Board ten (10) days prior to use of water.
- 4.2 Attached (Appendix C) are the commitments that form part of this operating plan.



LQ00511 Appendix A

Claim Status Report

18 October 2018

Claim Name and Nbr.	Grant No.	Expiry Date	Registered Owner	% Owned	NTS:#'s	Grouping	Permit
R Area 51	YC02755	2024/05/16	Ralph Barchen	100.00	105M14	HM03178	LQ00511
R Barry	YC02754	2024/05/16	Ralph Barchen	100.00	105M14	F HM03178	LQ00511
R Gambler	12813	2028/10/13	Ralph Barchen	100.00	105M14	L	LQ00511
R Gold Star	YC02351	2023/04/20	Ralph Barchen	100.00	105M14	HM03178	LQ00511
R MP 1	YC39521	2024/05/24	Ralph Barchen	100.00	105M14	HM01185	LQ00511
R MP 2	YC39522	2021/05/24	Ralph Barchen	100.00	105M14	HM01185	LQ00511
R MP 3	YC39523	2022/05/24	Ralph Barchen	100.00	105M14	HM01185	LQ00511
R MP 4 - 6	YC39524 - YC39526	2021/05/24	Ralph Barchen	100.00	105M14	HM01185	LQ00511
R Opps	YC47974	2024/04/20	Ralph Barchen	100.00	105M14	HM03178	LQ00511
R Opps 2	YC47975	2024/04/20	Ralph Barchen	100.00	105M14	HM03178	LQ00511

Criteria(s) used for search:

CLAIM DISTRICT: 1000003 CLAIM STATUS: ACTIVE & PENDING, APPLICATION PENDING DOCUMENT NUMBER: LQ 00511, LQ00511 REGULATION TYPE: QUARTZ

Left column indicator legend:

- R - Indicates the claim is on one or more pending renewal(s)
- P - Indicates the claim is pending

Right column indicator legend:

- L - Indicates the Quartz Lease.
- F - Indicates Full Quartz fraction (25+ acres)
- P - Indicates Partial Quartz fraction (<25 acres)
- D - Indicates Placer Discovery
- C - Indicates Placer Codiscovery
- B - Indicates Placer Fraction

Total claims selected : 12

APPENDIX B

Quartz Mining Land Use Regulation

Schedule 1 **Operating Conditions**

Removal of the Vegetative Mat

1. If the vegetative mat must be removed to carry out exploration activities, it must be removed so as to protect the seed and root stock contained within the mat and be stored separately from other overburden or bedrock removed for use in re-establishing the vegetative mat when the exploration program ceases.

Re-establishment of the Vegetative Mat

2. (1) All vegetated areas disturbed by exploration activities, including fuel and waste storage areas, clearings, corridors, temporary trails, camps and supporting infrastructure, and trenches and drill sites, must be left in a condition conducive to re-vegetation by native plant species or other species adaptable to the local environment to encourage re-vegetation comparable to similar, naturally occurring, environments in the area.

(2) Conditions conducive to re-vegetation include provision of adequate soil layer with moisture retaining ability, no soil contamination by hydrocarbons or other hazardous substances, provision of adequate seed or root stock, and contoured or otherwise stable slopes.

3. If adequate seed or root stock is not naturally available, re-seeding or transplanting of vegetation is required. Only non-invasive species may be used for re-seeding or transplanting. Consult with the Mining Inspector prior to seeding.

Erosion Control and Permafrost

4. All areas disturbed during an exploration program must be re-sloped, contoured or otherwise stabilized to prevent long-term soil erosion, slumping and subsidence.
5. All exploration activities must be carried out to avoid or minimize damage to and loss of permafrost.

Trenching

6. Trenching carried out by hand or using hand-held tools must be methodical. All trenches must be stabilized and marked to minimize risk to the public.
7. Trenches constructed with mechanized equipment must be back filled by first depositing any removed overburden and bedrock and then replacing the vegetative mat that was removed to construct the trench.

Historic Objects and Burial Grounds

8. Exploration activities must not be carried out within 30m of a known archeological site unless the Chief indicates, in writing, that such activities may be carried out.
9. Any sites containing archeological objects, paleontological objects or human remains or burial sites discovered in the course of carrying out an exploration program must be immediately marked and protected from further disturbance and, as soon as practicable, the discovery reported to the Chief. No further activities may be carried out within 30m of the site until the Chief indicates, in writing, that activities may be resumed.

Solid Waste

10. All solid waste, including debris, equipment, barrels, drums, and scrap metal, must be safely stored on the site of the exploration program while the program is carried out and must be disposed of in accordance with the *Solid Waste Regulation* when the program ceases.
11. Camps must be kept clean and tidy.

Petroleum Fuel and Hazardous Substances

12. If petroleum fuel storage capacity exceeds 4000 L, a secondary containment structure must be constructed. The containment structure must be made of a material impervious to petroleum products and:
 - a) if there is a single storage tank, be of sufficient size to accommodate at least 110% of the capacity of the storage tank; or
 - b) if there is more than one storage tank, be of sufficient size to accommodate 110% of the capacity of the largest storage tank or 10% of the total capacity of all the tanks, whichever is larger.
13. All petroleum products, including waste petroleum products, and any other hazardous substances must be stored in a secure fashion no less than 30m from the ordinary high water mark of any water body.
14. All petroleum products, including waste petroleum products, and any other hazardous substance, must be transferred and handled without spillage.
15. All petroleum products and any other hazardous substances must be removed from the site of the exploration program when the program ceases.
16. All waste petroleum products and any other special waste, as defined in the *Special Waste Regulations*, generated in the course of carrying out the exploration program must be disposed of in accordance with the *Special Waste Regulations* when the program ceases.

Spills and Spill Contingency Plans

17. A spill contingency plan for petroleum products and other hazardous waste must be prepared and posted in the camp and at all fuel handling locations used in carrying out the exploration program.

18. All spill clean-up equipment and material must be maintained in a state of readiness sufficient at all times to contain and clean-up any hazardous material spills.
19. If a spill occurs, the spill contingency plan must be immediately implemented and notice given to the 24-hour Yukon Spill Report Line. As soon as practicable, an inspector must be contacted. Whatever remedial action is required to clean-up the spill and reclaim the affected land and water must be taken.

Use of Vehicles

20. Vehicles must be maintained and operated to prevent spills of fuel, lubricants, coolants and oil.

Timber and Brush

21. Cut brush must not be piled so that it blocks movement of wildlife or people.
22. Leaning trees created by cutting of lines, corridors, temporary trails, and clearings must be felled.
23. When it is economically viable to do so, timber suitable for sale must be salvaged and stockpiled.
24. All risk of fire hazard must be avoided.

Drilling

25. All reasonable efforts must be made when drilling to minimize the impact on wildlife and the public.
26. Vegetation other than that within a drill sump, must not be covered with drill cuttings.
27. Core must be stored in a stable fashion.
28. Drill mud must be re-circulated when possible.
29. All drill fluids must be contained in a sump.
30. Drill holes that pose a hazard or that lead to ground water must be plugged to prevent flow of water to the surface.
31. The location of drill holes must be marked on the ground by flagging or other suitable means at the location of the drill hole.
32. Drilling waste, including fluid, cuttings and mud must not be left within 30m of a water body.

Roads, Trails, and Off-road Trail Use

33. All vehicles must be operated to avoid rutting and gouging of roads and trails.
34. Off road and trail routes must be reconnoitered and must be used in a way that minimizes ground disturbance, including damage to permafrost and sensitive wildlife habitat.
35. If rutting, gouging, ponding or permafrost degradation occurs off road or trail, vehicle use must be suspended or relocated to ground that is capable of bearing the weight of the vehicle without causing such damage.
36. Use of skids on permafrost or wet ground is only permitted outside of winter where it is not reasonable to use any other means of transporting equipment.
37. Routes for temporary trails must be reconnoitered and flagged.
38. In addition to any remedial action required in relation to item 2 of this schedule, temporary trails must be blocked to prevent further vehicular access.

Release of Sediment

39. All reasonable care must be taken in carrying out exploration activities near or adjacent to a water body to prevent sediment from entering a water body, unless otherwise permitted by law.

Use of Explosives

40. Explosives must be set off in a manner to minimize impact on wildlife and the public to ensure that forest fires, unplanned landslides, or artificial damming of water bodies does not occur.

Waste Rock

41. Waste rock piles must be located at least 30m from any water body and be physically stable.
42. Waste rock containing sulfides must be returned underground.
43. Access to underground openings must be blocked to prevent access by wildlife and people.

APPENDIX C

Proponent Commitments

- Guards for blasting signs, bury mineralized rock and permafrost will stabilize it.
- In order to do exploration on Keno Hill fuel will be delivered to equipment via 600 L tidy tank.
- When fueling equipment it will be monitored.
- Spill kit on site.
- Will travel daily from Mayo with tidy tank, only filled if needed. No storage of fuel.

Operational Guidelines

Exploration activities

The Yukon Chamber of Mines has developed an informative Best Management Practices document that should be reviewed in the context of project activities. The operator should reference the following document when planning and conducting project activities:

- Yukon Mineral and Coal Exploration Best Management Practices and Regulatory Guide (http://yukonminers.org/wp-content/uploads/2017/06/BMP_RG_Aug29_FINAL_WebFile.pdf).

Bears and other wildlife

To increase worker safety, reduce potential conflicts and prevent unnecessary wildlife mortality, the operator should implement pertinent components of:

- Guidelines for Industrial Activity in Bear Country for the Mineral Exploration, Placer Mining and Oil & Gas Industries (http://www.env.gov.yk.ca/publications-maps/documents/Guidelines_for_Industrial_Activity_in_Bear_Country.pdf)
- If an electric fence is an appropriate precaution, or a requirement, the operator should reference the following comprehensive and highly informative guide: Reducing Wildlife Conflict with Electric Fencing: A Beginner's Guide (<http://www.env.gov.yk.ca/publications-maps/documents/ElectricFencing.pdf>)

Invasive species

To minimize the risk and consequences of spreading invasive plant species the operator should:

- Become familiar with the Yukon invasive species and how to manage them by referring to the Yukon Invasive Species Council document, "Why Should I Care About Invasive Species" (http://yukoninvasives.com/pdf_docs/WhyshouldIcare2011_sm.pdf)

Heritage Resources

To better understand how to manage potential impacts to heritage resources, the operator should refer to the following document(s):

- Mineral Exploration Best Management Practices for Heritage Resources (http://www.tc.gov.yk.ca/pdf/Mineral_Exploration_BMP_for_Heritage_Resources.pdf)
- Best Management Practices for Burial Sites and Human Remains in Yukon (http://www.tc.gov.yk.ca/pdf/BurialSites_BMP_2014.pdf)

Work in/near water

Project activities have the potential to affect water quantity, quality and/or rate of flow. The operator should provide for the protection of water by applying practices described in:

- Best Management Practices for Works Affecting Water in Yukon (http://www.env.gov.yk.ca/publications-maps/documents/bestpractes_water.pdf).